

DOMOSLAWSKI, Zygmunt

KEDRA, Mieczyslaw; BOGDANIK, Tadeusz; DOMOSLAWSKI, Zygmunt

Modifications in blood and bone marrow pictures in infectious hepatitis. Pat. polska 5 no.3:195-206 July-Sept 54.

1. Z III Kliniki Chorob Wewnętrznych Akademii Medycznej we Wrocławiu. Kierownik: prof. dr B.Szczeklik.

(HEPATITIS, INFECTIOUS, blood in,)

(HEMOPOIETIC SYSTEM, in various diseases, hepatitis, infect.)

Domotenko, N. T.

AUTHORS: Domotenko, N. T. and Kornilov, I. I. (Moscow) 24-10-5/26

TITLE: Heat resistance and hardness in the hot state of alloys of the system Ni-Cr. (Zharoprochnost' i goryachaya tverdost' splavov sistemy nikel'-khrom).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1957, No.10, pp. 36-40 (USSR)

ABSTRACT: In earlier work of one of the authors and his team (Refs.1-3), it was established that within a certain temperature range those alloys will have the highest heat resistance the composition of which corresponds to the transient range and are in a state of finely dispersed decomposition. In the earlier work the tests were carried out (for a given temperature) with a single stress value which was usually reduced with increasing temperature. The influence of the stresses on the heat resistance of the alloy was not investigated. In this paper the influence on the position of the maximum heat resistance was studied for the alloys of the system Ni-Cr of the following factors: change in the stresses at a constant test temperature; change of the test temperature under the condition that during the transition to higher temperatures the initial stresses remain constant. For

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this purpose alloys were prepared with various Cr contents, between 5 and 50% with steps of 5% each. The smelting was carried out in a high frequency furnace inside corundum crucibles under a layer of basic slag. The specimens for testing by the centrifugal method were obtained by sucking the melt into a preheated porcelain tube; before the tests the alloys were homogenised in an argon atmosphere at 1150°C for six hours and then slowly cooled, together with the furnace. The heat resistance was tested at 800°C with loading values of 8, 10, 12.3, 14.3 and 15.8 kg/mm² and with a constant loading of 10 kg/mm² at the temperatures 700, 800, 850 and 900°C. The obtained data on the sag of the specimens as a function of the duration of loading for given initial loading values were utilised for determining the characteristic of the processes of creep of the alloys and for plotting the diagram composition-heat resistance. It was found that alloys containing between 5 and 25% Cr have a considerably higher creep speed than other alloys, therefore, the further tests were carried out with alloys containing between 30 and 50% Cr. The results obtained

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are plotted in the graphs, Figs.1-4. It was established that changes in the loading have an appreciable influence on the position of the maximum on the diagrams composition-heat resistance and conservation of the constancy of the stresses with increasing testing temperatures leads to a blurring of this maximum. In para.2 the results are discussed of the relation between the heat resistance (determined by means of the centrifugal method) and the hardness in the hot state in the temperature range 800 to 1100°C. The heat resistance of the alloys was studied at 800, 1000 and 1100°C for stresses of 10, 2.7 and 2.15 kg/mm² respectively; the hardness was studied on specimens containing 25, 30, 33.1, 35.5, 40, 43.5, 47.3 and 50% Cr. Analysis of the results indicates that increase in the temperature from 800 to 1100°C brings about a displacement of the maximum heat resistance into the range of non-saturated solid solutions; at 1100°C the most heat resistant alloys are those containing 38 to 40% Cr, whilst the limit solubility of Cr in nickel at this temperature is 44%. An increase in the Cr concentration in the solid solution of Ni leads to an increase of the hot

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hardness of the alloys; an appreciable increase of the hot hardness occurs for Cr contents over 30%; with increasing test temperatures a softening of the alloys takes place. It is claimed that the here used centrifugal method of testing permits to determine more clearly the range of alloys possessing a high heat resistance. There are 5 figures and 8 references, all of which are Slavic.

SUBMITTED: December 13, 1956.

ASSOCIATION: Military-Air Engineering Academy. (Voyenno-Vozdushnaya Inzhenernaya Akademiya).

AVAILABLE: Library of Congress.

Card 4/4

KORNILOV, I.I.; DOMOTENKO, N.T.

Heat resistance and hot hardness of nickel - chromium, molybdenum-tungsten binary system alloys. Issl. po zharopr. splav. 3:304-401
' 58. (MIRA 11:11)

(Heat resistant alloys) (Nickel-chromium alloys--Testing)
(Molybdenum-tungsten alloys--Testing)

AUTHORS: Kornilov, I. I., Domotenko, N. T. 30V/20-120-2-23/63

TITLE: The Influence of the Atomic Concentration of Chromium, Molybdenum and Tungsten Upon the Properties of Solid Nickel Solutions
(Vliyaniye atomnoy kontsentratsii khroma, molibdena i vol'frama na svoystva tverdykh rastvorov nikelya)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 120, Nr 2, pp. 311-313 (USSR)

ABSTRACT: The three above-mentioned elements of group VI of the periodic system have a body-centered (cubic) lattice and form limited solid solutions with nickel. The solubility of these elements decreases from chromium in the direction of molybdenum and tungsten. The differences of the atomic diameters as compared to those of nickel and their maximum solubility in nickel are given. The replacement of the atoms of the metal solvent by atoms of the dissolved substance causes additional chemical bindings in the system which strengthen the lattice of the metal solvent (Reference 1). This different solubility and the atomic struc-

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ture must also exert a different influence upon solid nickel solutions. The authors wanted to determine the rules governing these changes of property. For this purpose they employed the methods of physical-chemical analysis. The measurements of the lattice period of the solid nickel solution show that at equal atomic concentrations the degree of distortion of the crystalline lattice in nickel increases with the transition from Cr to Mo and W. This rule corresponds to the successive position of these elements in the periodic system of elements and is a consequence of the difference of their atomic diameters as compared to that of nickel (table 1). As is to be seen from it the greatest difference in the lattice parameters occurs in the cases of solid nickel solutions with tungsten (W 4,6 and 10%) and the smallest difference in cases with chromium (at the same concentrations of Cr). Molybdenum takes an intermediate position. The investigation of the specific electric resistance at the same atomic concentrations of Cr, Mo and W showed the sequence of the

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increase also in this physical constant on transition from chromium to molybdenum and further to tungsten. The solidity was studied in alloys with 4, 6 and 10% Cr, Mo and W at room temperature, at 800° and 1000° (table 2), the heat resistance at 800° and a tension of 4 kg/mm², as well as at 1000° and a tension of 2 kg/mm². From table 2 follows that the ultimate-stress values at equal atomic concentrations increase from chromium to tungsten and from tungsten to molybdenum. Molybdenum yields the highest increase in hardness of the solid nickel solutions. Thus the sequence of influences of Cr, Mo and W in this respect does not correspond to their position in the periodic system. The same holds for the heat resistance (determined by the method of bending). The corresponding curves at 800 and 1000° are shown by figure 1. From this follows that the increase in concentration of Cr, Mo and W leads to the strengthening of the alloys at the isothermal lines given in the diagram. The results of investigation were generalized in a joint

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diagram. From this follows that the heat resistance of the solid solutions of Cr, Mo and W at all concentrations changes in the same order as the hardness at the same temperature. This yields an order: Cr → W → Mo. A different influence of molybdenum and tungsten upon the electric resistance and upon the change of the period of the crystalline lattice of the solid solution on the one hand and upon the hardness and heat resistance on the other hand can be explained by the fact that the chemical forces of binding decisively influence the mechanical properties. An individual influence of the elements upon the chemical strengthening of solid nickel solutions takes place here. There are 2 figures, 2 tables and 3 Soviet references.

ASSOCIATION: Voenno-vozdushnaya inzhenernaya akademiya im. N. Ye. Zhukovskogo (Military Aviation Engineering Academy imeni N. Ye. Zhukovskiy)

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The Influence of the Atomic Concentration of
Chromium, Molybdenum and Tungsten Upon the
Properties of Solid Nickel Solutions

SOV/ 20-120-2-23/63

PRESENTED: January 11, 1958, by A. A. Blagonravov, Member,
Academy of Sciences, USSR

SUBMITTED: January 8, 1958

1. Nickel--Properties
2. Nickel--Lattices
3. Tungsten
- Metallurgical effects
4. Chromium--Metallurgical effects
5. Molybdenum--Metallurgical effects

Card 5/5

67714

SOV/126-7-3-10/44

18.1250

AUTHORS: Kornilov, I. I. and Domotenko, N. T.

TITLE: On the Basic Types of "Composition-Temperature Resistance"
Diagrams of Metallic Systems (K voprosu ob osnovnykh
tipakh diagramm "Sostav-zharoprochnost'" metallicheskikh
sistem)

PERIODICAL: Fizika metallov i metallovedeniye, Vol 7, Nr 3, pp 372-
377 (USSR)

ABSTRACT: The present work shows the results of experimental studies, using alloys of the nickel-chromium system, of the functional dependence of the heat resistance of alloys of a whole system. Heat resistance of the alloys was studied both in the uniform nickel and chromium base solid solution range and in the two-phase range of the system. Alloys for investigation were made by melting in a high-frequency furnace in corundum crucibles under a layer of basic slag. Nickel N-0000 and chromium Khl were used as raw materials. Prior to teeming the alloy was de-oxidized with silico-calcium. Specimens for heat resistance testing by a centrifugal method were obtained by sucking up the melt into pre-heated porcelain tubes, according to Stepanov's method (Ref.12). Before testing, the alloys were homogenized in an argon atmosphere

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On the Basic Types of "Composition-Temperature Resistance" Diagrams of Metallic Systems

at 1150°C for six hours, and then furnace cooled. In Figs.1 and 2 "angle of bend - testing time" curves are shown which have been plotted for Ni--Cr alloys with different chromium content for the isotherms 800 and 1000°C. In Fig.3 composition - heat resistance diagrams corresponding to two isotherms (800 and 1000°C) are shown, the upper portion of the figure giving the Ni--Cr thermal equilibrium diagram. The presence of limiting saturation ranges of two limited solid solutions (chromium in nickel, and nickel in chromium) in the two-phase compositions of alloys of this system formed by microstructures, are shown in Fig.4a and b. As a result of the above experiments the authors have arrived at the following conclusions:-

1. There exists a regularity in the change of heat resistance in the whole Ni--Cr system which contains mutually limiting solid solutions of the constituents.
2. The second type of composition - heat resistance diagram for systems with mutually limited solid solutions is

Card 2/3 confirmed by a composition - heat resistance diagram at 4

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two isotherms (800 and 1000°C).

3. The maximum values of heat resistance in the region at which the nickel base and chromium base limited solid solutions are saturated change with testing temperature.

4. At a temperature of 800°C the maximum heat resistance of chromium solid solutions is considerably greater than that of nickel solid solutions, and at 1000°C vice versa.

5. The difference in the maximum values of heat resistance of nickel base and chromium base solid solutions at 800 and 1000°C is due to the different extent of temperature softening of these solid solutions, having two types of crystal lattice.

There are 4 figures, 1 table and 12 soviet references.

SUBMITTED: September 14, 1957; after revision, December 18, 1957.

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Demotenko, N. I.

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PHASE I BOOK EXPLOITATION

SOV/3559

Akademiya nauk SSSR. Institut metallurgii. Nauchnyy sovet po probleme zharoprochnykh splavov

Issledovaniya po zharoprochnym splavam, t. 5 (Investigations of Heat-Resistant Alloys, Vol 5) Moscow, Izd-vo AN SSSR, 1959. 423 p. Errata slip inserted. 2,000 copies printed.

Ed. of Publishing House: V.A. Klimov; Tech. Ed.: I.F. Kuz'min; Editorial Board: I.P. Bardin, Academician, G.V. Kurdyumov, Academician, N.V. Ageyev, Corresponding Member, USSR Academy of Sciences (Resp. Ed.), I.A. Odintsov, I.M. Pavlov, and I.F. Zudin, Candidate of Technical Sciences.

PURPOSE: This book is intended for metallurgical engineers, research workers in metallurgy, and may also be of interest to students of advanced courses in metallurgy.

COVERAGE: This book, consisting of a number of papers, deals with the properties of heat-resisting metals and alloys. Each of the papers is devoted to the study of the factors which affect the properties and behavior of metals. The effects of various elements such as Cr, Mo, and W on the heat-resisting properties of various alloys are studied. Deformability and workability

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Investigations of Heat-Resistant

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of certain metals as related to the thermal conditions are the object of another study described. The problems of hydrogen embrittlement, diffusion and the deposition of ceramic coatings on metal surfaces by means of electrophoresis are examined. One paper describes the apparatus and methods used for growing monocrystals of metals. Boron-base metals are critically examined and evaluated. Results are given of studies of interatomic bonds and the behavior of atoms in metal. Tests of turbine and compressor blades are described. No personalities are mentioned. References accompany most of the articles.

TABLE OF CONTENTS:

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L 11351-63

EPA/EMT(m)/BDS

AEDC/AFTC/ASD/APGC

Paa-4

59

ACCESSION NR: AP3000212

S/0084/63/000/004/0016/0017

AUTHOR: Pugachev, A. (Candidate of technical sciences); Domotenko, N. (Candidate of technical sciences)

TITLE: Durability plus reliability

SOURCE: Grazhdanskaya aviatsiya, no. 4, 1963, 16-17

TOPIC TAGS: aircraft combustion chamber, temperature distribution, engine reliability, diffuser wall temperature

ABSTRACT: Temperature measurements of the ²combustion-chamber walls of the AI-20 aircraft engine under takeoff conditions indicate temperature-distribution variations from 250 to 300C. For example, the nonuniformity in the heating of the diffuser walls, whose maximal temperature is 700—750, amounts to 250, and the temperature before the turbine nozzle rises from a mean value of 780—800 to a maximal value of 900—950. Such temperature fluctuations of the combustion-chamber walls are caused by nonuniform flow of the inlet air, the distribution of the secondary and cooling air, and the structure of combustion processes in the primary combustion zone. The character of temperature distribution in the diffuser depends on:

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ACCESSION NR: AF3000212

on clearances between the leading and rear vane rows and between the rear vanes and the combustion-chamber head. The life and reliability of engines can be increased by avoiding, if possible, engine operations under elevated regimes. Air bleeding for such purposes as anti-icing increases gas and combustion-chamber temperatures and therefore is recommended for regimes below rated. In flights over regions with high ambient air temperatures, it is necessary to keep in mind that with an ambient temperature of 25-30 engine temperatures will rise. However, a further increase in ambient temperature has no considerable effect on the engine, because at such temperatures a thermocompressor cuts in and reduces the fuel supply. An increase in inlet air temperature reduces engine torque. This must be taken into account in the operation of Il-18 and An-10 aircraft. Orig. art. has: 1 figure.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 10Jun63

ENCL: 00

SUB CODE: AE,PR

NO REF SOV: 000

OTHER: 000

kes/uu
Card 2/2

DCMOTOR, E., dr.; POTONDI, A., dr.; ORAVETZ, B., dr.; GABOR, I., dr.

Spontaneous injuries of drunks. Orv. hetil. 106 no.16:740-742
10 Apr '65

1. Országos Mentőszolgálat Kórháza (igazgató: Oravetz, Bela, dr.);
Budapesti Orvostudományi Egyetem, Igazságügyi Orvostani Intézet
(igazgató: Okros, Sándor, dr.).

HUNGARY

DOMOTOR, Endre, Dr. VARGA, Antal, Dr; National Institute of Traumatology
(director: SZANTO, Gyorgy, Dr, professor) (Orszagos Traumatologiai Intezet).

"Present State of the Treatment of Olecranon Fracture."

Budapest, Magyar Traumatologia, Orthopaedia es Helyreallito Sebeszet,
Vol IX, No 3, Jul 66, pages 161-167.

Abstract: [Authors' English summary modified] Attention is called to the insufficiencies encountered in the treatment of olecranon fractures. The surgical procedures and functional results of a series of such injuries treated by the authors are reported. The importance of a stable and precise osteosynthesis is emphasized in the interest of which a new method is recommended involving wire cerclage combined with crossed wiring. } Hungarian, 12 Western references.

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L 37214-66 T JK

ACC NR: AP6028493

SOURCE CODE: HU/0018/65/017/006/0615/0624

AUTHOR: Kertai, Pal; Sulyok, Sarolta N.--Shuyok, S. N.; Domotor, Erzsébet--
Demeter, E. 3/

ORG: Department of Physiology and Pathophysiology, National Public Health Institute
(Országos Kózegegysegügyi Intézet, Elettani és Kóreltani Osztály)

TITLE: Investigation of the influence of Salmonella typhi endotoxin on the
leucocyte count 6

SOURCE: Kiserletes orvostudomány, v. 17, no. 6, 1965, 615-624

TOPIC TAGS: toxin, drug effect, experiment animal, blood disease, leukopenia,
blood, hematology

ABSTRACT: The changes in the leucocyte count following i.v. injection of endotoxin have been analyzed. It was determined that only an early leukocytosis can be noted following injection of a small dose or, in pyrogen-resistant animals, following injection of a larger dose as well. The leukocytosis can be inhibited by section of the spinal cord. The leukocytosis which develops some time after an intermediary or large dose of endotoxin is preceded by leukopenia. This double reaction does not occur when preparatory endotoxin injections are given previously. Doses of endotoxin which cause fulminating leukopenia and pronounced late leukocytosis in normal controls are completely without effect in pyrogen-resistant animals and in those with a severed spinal cord. The experiments led to the conclusion that the leucocyte reaction following endotoxin injection is the result of two different mechanisms. The authors thank Doctor Ujhelyi Karoly, OKI, for providing the preparations. Klara Stark and Edit Katona gave technical assistance. Orig. art. has: 7 figures. [JPRS: 34,161]

SUB CODE: 06 / SUBM DATE: 08Feb65 / ORIG REF: 008 / OTH REF: 067

Card 1/1 MLP

RELA, Arpad; SZIEKELY, Jozsef Ivan; KOO, Eva; DOMOTOR, Istvan; STOCK, Imre.

Effect of the stimulation of the mesencephalic reticular formation on conditioned motor reflexes in rats. Kiserl. orvostud.
16 no.2:149-152 Ap'64

1. Budapesti Orvostudományi Egyetem Élettani Intézete.

*

SZEKELY, Jozsef Ivan; DOMCTOR, Istvan; KOO, Eva; STOCK, Imre

Mesencephalic reticular formation and experimental neurosis in rats.
Kiserl. orvostud. 16 no.4:423-427 Ag '64.

1. Budapesti Orvostudományi Egyetem Ellettani Intezete.

HUNGARY

ZAPPE, Lajos, Dr, DOMOTOR, Lajos, Dr; National Neurosurgical Scientific Institute (Orszagos Idegsebészeti Tudományos Intezet) (director: ZOLTAN, Laszlo, Dr).

"A Case of Liquor Hypotension With Vaso-Anoxic Cerebral Damage."

Budapest, Ideggyógyászati Szemle, Vol XIV, No 9, Sept 63, pages 283-287.

Abstract: [Authors' Hungarian summary] The authors describe the case history of a 47 year-old male patient. Fever (probably due to a viral infection) was followed by the development of aliquorrhoea and severe symptoms of apallium syndrome. Antibiotics and intrathecal as well as parenteral liquid therapy have been administered and the disease cleared without any remaining symptoms. The analysis of the clinical data suggests that both the aliquorrhoea and the nervous system symptoms were the result of an intracranial circulation disturbance. The authors elicit the theory that, in the pathomechanism of liquor-hypotensive syndromes, a decisive role is played by circulatory disturbances and by secondary reflexes which arise from the decrease of liquor pressure and affect the cerebral and plexus circulation. 8 Western, 4 Hungarian references.

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TOTH, Szabolcs, dr.; ZOLTAN, László, dr.; DOMOTOR, Lajos, dr.

Treatment of movement disorders by pedunculotomy. Ideggyogy. szemle
15 no.4:104-109 Ap '62.

1. Országos Idegsebészeti Tudományos Intézet (Igazgató: Zoltan László
dr.) közleménye.

(MOVEMENT DISORDERS surg) (BRAIN surg)

RADNAI, B.; DEMOTOR, L.

Allergic granulomatosis of the myocardium. Acta morph. acad.
sci. hung. 12 no.3:333-344 '64

1. Department of Pathology (Head: B.Radnai), Municipal Istvan
Hospital, Budapest.

*

HAFFNER, Zsolt, dr.; DOMOTOR, Laszlo, dr.; VACZO, Gyorgy, dr.

A rare syndrome from chordoma of the cervical spine. Ideg.szemle 14
no.12:370-375 D '61.

1. A Fovarosí Istvan Mórhas Ideggyógyászati Kóronctani és Rontgenész-
tálynak közleménye.

(SPINE neopl) (CHORDOMA case reports)

DENES, Janos, dr.; DOMOTOR, László, dr.

Treatment of megacolon by rectal dilatation. Gyermekgyógyászat
14 no.10:302-307 0 '63.

1. Budapesti Istvan korház gyermeksebészeti osztály és
prosectura közlenye.

(MEGACOLON) (RECTUM) (BIOPSY)
(DIAGNOSIS, DIFFERENTIAL) (RADIOGRAPHY)
(PATHOLOGY)

ZAPPE, Lajos, dr.; DOMOTOR, Lajos, dr.

A case of vaso-anoxic brain damage with cerebrospinal fluid hypotension. Ideggyogy. szemle 16 no.9:283-287 S '63.

1. Az Országos Idegsebészeti Tudományos Intézet (igazgató: Zoltan László dr.) közleménye.

(DEHYDRATION) (INTRACRANIAL PRESSURE)
(CEREBRAL ANOXIA) (ELECTROENCEPHALOGRAPHY)
(ANTIBIOTICS) (INFUSIONS, PARENTERAL)

DOMOTOR, Laszlo, dr.; WESSELY, Janos, dr.

Isolated visceral Kaposi's sarcoma. Orv. hetil. 105 no.11:
502-505 15 Mr '64

1. Fcvarosi Istvan Korhaz, Korbonctani Osztaly, Budapesti
Orvostudomanyi Egyetem, IV. Belgyogyaszati Klinika es Or-
szagos Kardiologiai Intezet.

*

DENES, Janos, dr.; LEB, Jozsef, dr.; DOMOTOR, Laszlo, dr.

Fissura vesico-intestinalis. Orv. hetil. 105 no.35:1660-1661
Ag 30 '64.

1. Budapesti Istvan Korhaz, Gyermeksebészeti Osztaly es Prosectura.

GERO, Andor, dr.; KELEMEN, Andor, dr.; DOMOTOR, Laszlo, dr.

Isolated gastric lymphogranulomatosis diagnosed intra vitam.
Orv. hetil. 105 no.32:1514-1516 9 Ag '64.

1. IX. ker. Tanacs Gyali-uti Korhaza, Belosztaly es Fovarosi
Istvan Korhaz, Prosectura.

ACC NR: AP6001339

SOURCE CODE: HU/0021/65/000/001/0013/0017

AUTHOR: Leb, Jozsef--Leb, Y. (Doctor; Member of surgical ward and prosectura);
Domotor, Laszlo--Demeter, Z. (Doctor; Member of surgical ward and prosectura)

ORG: I. Surgical Ward and Prosectura, Istvan Metropolitan Hospital, Budapest
(Fovarosi Istvan korhaz I. Sebeszeti Osztaly es Prosectura)

TITLE: Rare case of postradiational osteogenic sarcoma

SOURCE: Magyar Radiologia, no.1, 1965, 13-17

TOPIC TAGS: tumor, radiology, bone disease, radiotherapy, radiation biologic effect, pathology

ABSTRACT: The case of a 35 year old woman is described who developed osteogenic sarcoma on the side of the pelvic bone and sacrum which had been irradiated 23 years earlier following removal of a dysgerminoma. The brief presentation of the case is followed by a review of the concept of postradiational sarcoma and the literature data related to the disease. Conclusion are drawn on the basis of the authors' observations and of the cases reported in the literature. Attention is called to this rare but dangerous complication of radiotherapy and to the possibilities of its prevention. Orig. art. has: 2 figures. [JPRS]

SUB CODE: 06 / SUBM DATE: none / OTH REF: 022

Card 1/1 jw

DOMOTOR, Sandor (Budapest); MOLNAR, Erik, akademikus (Budapest)

National character, ethnic group; also, remark by Erik Molnar. Magyar Tud 68 no.4:241-248 Ap '61. (EEAI 10:6)

1. A Nemmuvelési Intezet munkatársa (for Domotor). 2. Intezeti igazgató, Magyar Tudományos Akadémia Történettudományi Intézete, Budapest (for Molnar)
(National characteristics) (Ethnology)

DOMOTOR, Sándor, dr.

Professional circles in the cultural home of Dorog. Munka 10
no. 2:17 F '60.

1. Muvelodesi otthon igazgató, Dorog.

DOMOTOR, Tekla

The Kiel and Copenhagen Congress of Folk Tales. Magyar tud 67 no.1:
43-44 Ja '60. (EEAI 9:7)
(Folk literature--History and criticism)

DOMOTOR, V.

DOMOTOR, V.

"Organizing Turntables", P. 15 (TORBETTERELES, Vol. 2, No. 3, Mar. 1954,
Budapest, Hungary)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 4,
No. 1, Jan. 1955, Uncl.

Fek, Miksa; SELJAN, Bela; DOMOTOR, Zoltan; BRINNER, Robert

Hungarian experiments with bathrooms constructed on the basis of space elements. *Épületgépészet* 12 no.1/2:21-28 Mr '63.

1. "Épületgépészet" szerkeszto bizottsagi tagja (for Fek).

PAAL, Margit, dr.; CSOMOR, Sandor, dr.; DOMOTDRI, Jeno, dr.; SZINNYAI, Miklos, dr.

Changes in the transaminase activity (SGOT) in female cancer patients during radiation therapy. Magy. radiol. 15 no.2:93-98 Ap '63.

1. Budapesti orvostudományi Egyetem I. sz. Női Klinikájának közleménye. (Igazgató: Horn Béla dr., egyet. tanár).

(RADIOTHERAPY)	(OVARIAN NEOPLASMS)	(UTERINE NEOPLASMS)
(ENZYME TESTS)	(ASPARTATE AMINOTRANSFERASE)	(VULVAR NEOPLASMS)
(BLOOD CHEMICAL ANALYSIS)		

SZINNYAI, Miklos, dr.; DOMOTORI, Jeno, dr.; PAAL, Margit, dr.

Transaminase studies in the early and late pregnancy toxicoses.
Magy. noorv. lap. 26 no.2:99-102 Mr '63.

1. Budapesti Orvostudományi Egyetem I. sz. Női Klinikájának közleménye
(Igazgató: Horn Béla dr. egyet. tanár).
(PREGNANCY TOXEMIAS) (ASPARTATE AMINOTRANSFERASE)
(BLOOD CHEMICAL ANALYSIS)

GOSZLETH, Tibor, dr.; DOMOTORI, Jeno, dr.

The role of forceps delivery in modern obstetrics. Magy.noorv.
lap. 26 no.5:272-280 S '63.

1. A Budapesti Orvostudományi Egyetem 1. sz. Női Klinikájának
közleménye (Igazgató: Horn Béla dr. egyet. tanár.).

*

RESEARCH

CEKOR, Sándor, Dr. DOMBÓRI, László, Dr. HÉRT, Sándor, Dr. Medical University of Budapest, I. Nőgyógyászati Klinika (Budapest Obstetrics and Gynecology, I. Női Klinika).

"Experiences with the Vacuum Extractor."

Magyarost, Orvosi Hetilap, Vol. 104, No. 6, 10 Feb 1963, pages 239-240.

Abstract: [Authors' Hungarian summary modified] The authors compare the obstetrical cases of two 18 months periods before and after the introduction of the vacuum extractor. The number of instrument deliveries increased. Forceps deliveries decreased and the extractor was used in 4.5 per cent of the cases. Maternal injuries and post partum complications as well as perinatal mortality and injury to the child decreased. The indications and contraindications for the use of the extractor are discussed. Some technical problems are mentioned. The need for a careful observance of the birth process and for the objective evaluation of the complications is stressed along with a strong recommendation of the new process. 13 Western, 10 Eastern European references.

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HUNGARY

~~DOMOTORI~~, Jeno, Dr, SZEMEREDI, Gyula, Dr, GIMES, Rezső, Dr: Medical University of Budapest, I. Gynecological Clinic (Budapesti Orvostudományi Egyetem, I. Női Klinika) and National Animal Health Institute (Országos Allategészségügyi Intézet).

"The Role of Listeriosis in the Etiology of Spontaneous Abortus."

Budapest, Orvosi Hetilap, Vol 104, No 26, 30 June 63, pages 1210-1212.

Abstract: [Authors' Hungarian summary] Bacteriological and serological tests for listeriosis were made by the authors on 115 patients who had spontaneous abortus. Agglutination and complement binding titer values, characteristic for listeriosis, were found in 2 cases. For further investigation of the frequency of listeriosis, tests on larger groups of patients and investigations aimed at the culturing of the causative agent are necessary. 2 Eastern European, 6 Western references.

1/1

DOMOTORI, Jeno, dr.; CSOMOR, Sandor, dr.; PAAL Margit, dr.; SZINYAI,
Miklos, dr.

Some relations of serum glutamic-oxaloacetic transaminase to
the pathology of pregnancy. Orv. hetil. 105 no.19:828-830
3 My'64.

1. Budapesti Orvostudományi Egyetem, I. Noi Klinika.

*

DOMOTORI, Jeno, dr.

Sex chromatin studies in vaginal and oral smears by means of
phase contrast microscopy. Orv. hetil. 106 no.22:1027-1029
30 My'65.

1. Budapesti Orvostudományi Egyetem, I. Női Klinika (igazgató:
Horn, Béla, dr.).

DOMOTORI, Jeno, dr.; CSOMOR, Sandor, dr.

Hymenal atresia. Orv. hetil. 106 no.24:1130-1131 13 Ja'65.

1. Budapesti Orvostudományi Egyetem, I. Női Klinika (igazgató:
Horn, Béla, dr.).

HORN, Bela, dr.; DOMOTORI, Jeno, dr.; KISZEL, Janos, dr.; CSORDAS, Terez, dr.

Incidence of developmental abnormalities in the material of the
Gynecologic Clinic I. of the Budapest University Medical School.
Orv. hetil. 106 no.35:1651-1654 29 Ag '65.

Data to the etiology of developmental abnormalities. Ibid.:1654-1656

1. Budapesti Orvostudományi Egyetem, I. Női Klinika (igazgató:
Horn, Bela, dr.).

MEHES, K.; DOMOTORI, Jeno, dr.; RECHNITZ, Kurt, dr.

On a method for sex-chromatin determination. Crv. hetil. 105
no.31:1483-1484 2 Ag '64.

HUNGARY

KISZEL, Janos, DOMOTORI, Jenő, KONYA, Zoltan; Medical University of Budapest, I. Gynecological Clinic (Budapesti Orvostudományi Egyetem, I. sz. Női Klinika).

"Combined Administration of Prednisolone and Antibacterial Compounds to Guinea Pigs Infected with Staphylococcus Via the Genital Route."

Budapest, Kiserletes Orvostudomány, Vol XVIII, No 2, Apr 66, pages 124-127.

Abstract: [Authors' Hungarian summary] Guinea pigs infected with hemolytic Staph. aureus via the genital route were used to study the joint effect of prednisolone and different antibacterial compounds (effective as well as not effective against the pathogen, in vitro) on the course of the infection. Considering the length of survival of the individual groups, the pathological changes and the results of culture of the pathogen from different organs, it was found that the course of the infection was made more severe by prednisolone, in the dose applied and under the experimental conditions used, in all of the animal groups. 2 Hungarian, 14 Western references. [Manuscript received 12 Dec 64.]

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DOMOUZOV, K.

"A difficult repair of a steam boiler."

p. 19 (Elektroenergiia) Vol. 8, no. 7, July 1957
Sofia, Bulgaria

SC: Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 4,
April 1958

DOMOZHAKOV, N.G.

Salbyk kurgan excavations in the Khakass Autonomous Province.
Izv.Vses.geog.ob-va 88 no.6:555-558 N-D '56. (MLRA 10:2)

(Khakass Autonomous Province--Excavations (Archaeology))
(Mounds)

21015

S/188/61/000/002/010/010
B108/3209

3.2200 (1041, 1080)

AUTHOR: Domozhilova, L. M.

TITLE: Study of a special case of the rotation of a celestial body

PERIODICAL: Vestnik Moskovskogo universiteta. Seriya 3, fizika,
astronomiya, no. 2, 1961, 82-87

TEXT: The present paper contains results on a slightly disturbed motion of a celestial body, similar to the regular motion of the satellite "Spits". The size of the body is assumed to be small as compared to the length of the radius vector to the center of inertia. The differential equation of the above motion is taken from Ref. 3 (Duboshin, G. N. Byul. ITA, VII, No. 7 (90), 1960):

$$\frac{d^2\tilde{\psi}}{d\tau^2} = -2\operatorname{ctg}\theta\left(\frac{d\tilde{\psi}}{d\tau} + 1\right) + 3\sin\tilde{\phi}\cos\tilde{\psi}. \quad (1)$$

$$\frac{d^2\theta}{d\tau^2} = \sin\theta\cos\theta\left(\frac{d\tilde{\psi}}{d\tau} + 1\right)^2 + 3\sin\theta\cos\theta\sin^2\tilde{\psi}.$$

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where $\tau = nt$, n - the angular velocity of the body around the Earth, t - time, $\tilde{\psi} = \psi - \tau$, ψ - precession angle, $\tilde{\varphi}$ - rotation angle. Since the motion is assumed to be slightly disturbed, the initial conditions are slightly different from those of Ref. 3 and read as follows:

$$\begin{aligned} \tau=0, \quad \tilde{\psi} &= 1,570505, \quad \frac{d\tilde{\psi}}{d\tau} = 1,570505, \\ \delta &= 1,570505, \quad \frac{d\delta}{d\tau} = 1,570505. \end{aligned} \quad (3)$$

The problem was solved at the Vychislitel'nyy tsentr Moskovskogo gosudarstvennogo universiteta (Computer Center of Moscow State University) for $0 \leq \tau \leq 50$, corresponding to up to 25 revolutions about the Earth. The variation of $\tilde{\psi}$ and $\tilde{\varphi}$ is a periodic fluctuation equal to twice the initial deflection from $\pi/2$. In the present case, this deviation was nearly $2''$. Table 1 shows the results for a sector of $0 \leq \tau \leq 12$, Table 2 for $144 \leq \tau \leq 157$ (corresponding to the 24-th and 25-th revolution). The first-approximation formulas of Ref. 4 (Domozhilova, L. M., Soobshcheniya CAISH No 114) for a nearly regular motion of the satellite "Spits" (Ref. 3) have the form

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$$\begin{aligned}\tilde{\psi} &= \frac{\pi}{2} + x_0 \cos \sqrt{3}\tau + \frac{x'_0}{\sqrt{2}} \sin \sqrt{3}\tau, \\ \tilde{\theta} &= \frac{\pi}{2} + y_0 \cos 2\tau + \frac{y'_0}{2} \sin 2\tau,\end{aligned}\quad (4),$$

where

$$\begin{aligned}x_0 &= \tilde{\psi}_0 - \frac{\pi}{2}, \quad y_0 = \tilde{\theta}_0 - \frac{\pi}{2}, \\ x'_0 &= \left(\frac{d\tilde{\psi}}{d\tau} \right)_0, \quad y'_0 = \left(\frac{d\tilde{\theta}}{d\tau} \right)_0.\end{aligned}$$

are the initial perturbation. The values of $\tilde{\psi}$ and $\tilde{\theta}$ as calculated by these formulas are also given in Tables 1 and 2 (denoted there by $\tilde{\psi}_I$ and $\tilde{\theta}_I$) and
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agree well with the above values. Thus, one can see that for slight deviations from the initial values, corresponding to the regular motion of the satellite "Spits", the first-approximation formulas give satisfactory results, in the range of $0 \leq \tau \leq 50 \pi$. There are 4 figures, 2 tables, and 4 Soviet-bloc references.

ASSOCIATION: Kafedra nebesnoy mekhaniki i gravimetrii (Department of Celestial Mechanics and Gravimetry)

SUBMITTED: December 6, 1960

τ	$\bar{\psi}$	$\bar{\psi}_1$	$\bar{\psi}_2$
0.0	1.570505	1.570505	1.570505
1	57054	57054	57054
3	57063	57064	57063
5	57074	57076	57074
9	57096	57100	57096
1.3	57111	57112	57111
7	57112	57104	57112
2.1	57097	57081	57098
5	57075	57057	57075
9	57065	57047	57055
Card 4/6	57046	57056	57046
7	57053	57083	57052
			57083

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4.1	57072	57104	57072	57104
5	57095	57112	57095	57113
9	57110	57101	57111	57102
5.1	57113	57090	57114	57091
5	57107	57065	57107	57065
9	57088	57049	57088	57049
6.1	57077	57047	57077	57048
5	57056	57069	57056	57060
9	57046	57084	57047	57084
7.3	57052	57106	57052	57106
7.7	57070	57112	57071	57112
8.1	57093	57098	57094	57099
5	57110	57074	57110	57074
7	57113	57062	57113	57062
9.1	1,57108	1,57048	1,57108	1,57048
5	57090	57053	57090	57053
9	57067	57075	57067	57075
10.3	57050	57099	57050	57100
5	57046	57108	57047	57108
7	57047	57112	57047	57112
9	57051	57111	57051	57111
11.3	57069	57065	57069	57096
7	57092	57070	57092	57070
12.1	57109	57051	57109	57051
3	57113	57047	57113	57048
7	57109	57055	57109	57056

Table 1 Cont.

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Table 2

1	2	3	4	5
144.1	1.57068	1.57049	1.57068	1.57050
144.2	57052	57047	57052	57047
144.3	57050	57050	57051	57051
144.4	57046	57069	57047	57069
145.3	57058	57094	57058	57095
145.7	57079	57111	57079	57111
146.9	57091	57112	57091	57112
146.3	57108	57100	57109	57100
147.6	57113	57076	57113	57076
147.1	57102	57054	57102	57054
148.5	57081	57047	57081	57048
148.3	57059	57061	57060	57061
149.9	57046	57086	57047	57086
149.1	57057	57112	57057	57112
150.3	57089	57111	57089	57112
150.5	57107	57072	57108	57072
151.3	57113	57052	57113	57052
151.7	57110	57047	57110	57047
152.1	57094	57054	57094	57055
152.5	57071	57076	57071	57077
153.3	57052	57101	57053	57101
153.7	57046	57112	57046	57112
154.1	57055	57104	57056	57104
154.5	57076	57081	57076	57081
155.3	1.57098	1.57057	1.57098	1.57058
155.7	57107	57050	57107	57050
156.3	57112	57047	57112	57048
156.7	57113	57049	57114	57050
157.1	57111	57057	57111	57057
	57095	57080	57096	57081
	57073	57103	57073	57104
	57053	57112	57054	57112
	57046	57101	57046	57102
	57048	57090	57048	57090
	57063	57065	57064	57065
	57086	57048	57086	57049
	57097	57047	57097	57048
	57106	57051	57106	57052

Card 6/6

— DOMOZHILOVA, B.M.

Numerical investigation of a particular case of the rotational
motion of a heavenly body. Soob. CAISH no.114:33-48 '61.
(Artificial satellites—Orbits) (MIRA 14:3)

DOMOZHIR, V.N.

Pathogenetic treatment of hypochromic anemia. Mat.po obm.nauch.
inform. no.2:203-208 '58. (MIRA 13:6)

1. Iz otdela klinicheskoy gematologii (sav. - prof. D.N. Yanovskiy)
Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy
meditsiny, Kiev.
(ANEMIA) (IRON-THERAPEUTIC USE)

KAGANOVICH, R.A.; DMOZHIR, V.N.

Etiology of hypochromic anemias. Vrach. delo no.5:40-46 My '62.
(MIRA 15:6)

1. Otdel klinicheskoy gematologii (zav. - prof. D.N.
Yanovskiy) Ukrainskogo nauchno-issledovatel'skogo instituta
klinicheskoy meditsiny imeni akademika N.D. Strazhesko.
(ANEMIA)

DOMOZHIE-KARPENKO, Y.M. (Kiyev)

(Comparative evaluation of methods for the pathogenetic treatment of some anemic syndromes. Vrach.delo no.3:247-251 Nr '60.

(MIRA 13:6)

1. Otdel klinicheskoy gematologii (sav. - prof. D.N. Yanovskiy)
Ukrainskogo nauchno-issledovatel'skogo instituta klinicheskoy
meditsiny imeni akademika N.D. Strazhesko.

(ANEMIA)

DOMOZHIR-KARPENKO, V.N.

Changes in the size and form of erythrocytes in iron deficiency anemia after treatment with iron preparations. Trudy Kiev. nauch.-issl. inst. perel. krovi i neotlozh. khir. 3:173-182 '61.

(MIRA 17:10)

1. Ukrainskiy institut klinicheskoy meditsiny imeni akademika N.D. Strazhesko.

GOLOV, V.K.; OMARKOV, V.S.; NASEDKIN, B.Ye.; DOROVIN, V.A.; DOMOZHIROV, K.D

Semidry pressing of steel casting equipment. Ogneupory 17 no.5:
195-201 My '52. (MIRA 8:9)

1. Nizhne-Tagil'skiy ogneuporny zavod
(Foundry machinery and supplies)

PAPAKIN, Kh.M.; DORONIN, V.A.; Prinimali uchastiye: OBUKHOV, A.A.;
GOLOV, V.K. [deceased]; OSTROVSKIY, B.N.; MURATOV, A.A.;
DOMOZHIROV, K.D.

Molding fire clay grates for coke ovens from moist mixture.
Ogneupory 26 no.9:402-404 '61. (MIRA 14:9)

1. Nizhne-Tagil'skiy metallurgicheskiy kombinat.
(Nizhniy tagil--Fire brick)

GORBACHEV, A.A.; DOMOZHIROV, V.N.

Changing the masonry of the stands of a bell-type furnace. Sbor.
rath.predl.vnedr.v proizvod. no.5:38 '60. (MIRA 14:8)

1. Magnitogorskiy metallurgicheskiy kombinat.
(Furnaces, Heat treating)

DOMRA, V.A., insh.

Inadequate chapter in a useful book ("Crushed stone and gravel
plants in railroad transportan" by V.A.Bogoslovskii. S.P.Pershin.
Reviewed by V.A.Domra) Put' i put.khoz. no.12:41 D '59.
(MIRA 13:4)

1. Otdel burovsryvnykh rabot tresta "Mostorentonnel'."
(Ballast(Railroads)
(Bogoslovskii, V.A.)
(Pershin, S.P.)

DOMRA, V.A.

Bit dressing and hardening. Put' i put.khoz. 4 no.6:30-31 Je
'60. (MIRA 13:7)

(Rock drills)

DOMRA, V.A., Inzh.

Effective blasting method. Put' i put. khoz. 5 no.3:28-29 Mr '61.
(MIRA 14:3)

(Quarries and quarrying)

DOMRACHEV, A.; SARAPUKA, V.

Reinforced concrete and metallic structures for drying earcorn.
Muk.-elev. prom. 29 no.4:8-9 Ap '63. (MIRA 16:7)

1. Nachal'nik tekhnicheskogo otdela tresta Ukrelevatormel'stroy
(for Domrachev). 2. Nachal'nik proyektno-smetnoy gruppy tresta
Ukrelevatormel'stroy (for Sarapuka).
(Corn(Maize)--Drying)

DOMRACHEV, A. F.

"Comparative Investigation of Unicoordinate Hydraulic Tracking Systems Used in Copying Machines." Cand Tech Sci, Kiev Polytechnic Inst, Kiev, 1954. (RZhMekh, Feb 55)

So: Sum. No. 631, 26 ug 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (14)

DOMRACHEV, A.F., kand.tekhn.nauk

New hydraulic contour followers having nondifferential cylinders.

Izv. KPI 20:243-260 '57.

(MIRA 11:3)

(Hydraulic control)

DOMRACHEV, A.S. (Leningrad, Zanevskiy pr., d.1/82, kv.40-a)

Atelectasis of the lower lobe of the left lung after mitral
commissurotomy. Vest.khir. no.3:14-19 '62. (MIRA 15:3)

1. Iz kafedry torakal'noy khirurgii i anesteziologii (zav. - prof.
S.A. Gadzhiyev) Leningradskogo ordena Lenina instituta usovershenst-
vovaniya vrachey im. S.M. Kirova.
(LUNGS--COLLAPSE) (MITRAL VALVE--SURGERY)

DOMRACHEV, D.P.

Constructing an open-hearth furnace. Prom.stroi. 38
no.6:21-26 '60. (MIRA 13:7)

1. Nachal'nik uchastka "Martenstroy" tresta Cherepovetsmetal-
lurgstroy. (Open-hearth furnaces)

II contained the 4 rings in the form of a β -substituted cyclohexane and not a chain. The structure of I was established by the fact that of II, the 5th Pb group forming a β -substituted cyclohexane. Thus, the Ze as structure I and II are the main structural features of 2 big neryl groups in which each Pb of each of these groups was linked to the central C atom appeared to be confirmed further.

G. M. Kozlov

100
 100
 100

On the structure of organochromic compounds. 20-6-30/59

reaction with $LiAlD_4$. If, however they have a B-structure (illustration 1) diphenyl would contain no deuterium. The composition and the yield of the organic products of the light dispersion of the organochromic compounds in the chloroform agree well with the B-structures. It is known that the compounds of the B-series are paramagnetic and have the magnetic moment = 1.7 of the Bohr's magneton. This corresponds to the existence of a not coupled electron in their molecule. Therefore, the photographing of the spectra of the paramagnetic electron-resonance of such compounds was interesting in order to obtain data about the localisation of the free electron. The absorption spectrum of the aqueous solution of one of these substances (III) is shown by illustration 2. The existence of a superfine structure and the qualitative analysis of the intensity distribution shows that the not coupled electron is in interaction with the hydrogen nuclei of the aromatic rings. (2 illustrations, 1 Slavic reference.)

ASSOCIATION:

Scientific Research Institute for Chemistry at the Gorkij State University "N.I. LOBACHEVSKIY".
MOSCOW PHYSICAL-TECHNICAL INSTITUTE.
Institute for Chemical Physics of the Academy of Science of the U.S.S.R.

CARD 2/3

On the structure of organochromic compounds.

20-6-30/59

PRESENTED BY: N.N. SEMENOV, Member of the Academy.
SUBMITTED: 4.3. 1957
AVAILABLE: Library of Congress.

CARD 3/3

Dom RICHY G. A.

RAZUVAYEV, G.A.; SOROKIN, Yu.A.; DOMRACHEV, G.A.; PETUKHOV, G.G.; TSVETKOV,
Yu.D., MOLIN, Yu.N.

On the structure of chromium organic compounds. Dokl. AN SSSR 113
no.6:1293-1394 Ap. '57. (MIRA 10:6)

1. Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom gosst-
darstvennom universitete im. N.I. Lobachevskogo i Moskovskiy fiziko-
tekhnicheskiy institut i Institut khimicheskoy fiziki Akademii nauk
SSSR. Predstavleno akademikom N.N. Semenovym.
(Chromium organic compounds)

DOMRACHEV, G.A.

20-1-32/54

AUTHOR TSETKOV Yu.D., VOYEVODSKIY V.V., RAZUVAYEV G.A.,
SOROKIN Yu.V., DOMRACHEV G.A.

TITLE Electron Spin Resonance in Some Sandwich Type Chromaromatic Compounds.
(Elektronnyy paramagnitnyy rezonans v nekotorykh khromaromaticheskikh soyedineniyakh sandvichevogo stroyeniya -Russian)

PERIODICAL Doklady Akad.Nauk SSSR, 1957, Vol 115, Nr 1, pp 118- 121 (U.S.S.R.)

ABSTRACT In recent times increased interest was devoted to the study of the mentioned compounds of the ferrocene type, $(Fe(C_5H_5)_2)$, the ferrocene ion and analogous molecules with aromatic addenda. In spite of a great number of papers on this subject, there hitherto exists no general theory which might explain the present data on the "sandwich" structure of these molecules. Their formation and steadiness cannot be fully explained by the generally accepted conception of valence. The data obtained indicate that in the majority of compounds of this type the linkage of addenda with the complex-forming atoms is of a covalent character. This is especially indicated by magnetic measurements. According to the latter these materials are either diamagnetic or they possess a magnetic momentum which corresponds to one, two or at most three non-paired electrons. The ion salts of these metals of such compounds by the method of electronic paramagnetic resonance (called EPR in the following) have hitherto been described in publications. The present paper gives measurements of the EPR spectra of the following compounds: $Cr(C_6H_6)_2J$ (I), $Cr(C_6H_5)_2J$ (II) and $Cr(C_6H_5 - C_6H_5 - C_6H_5)_2OC_6H_5$ (III). The static magnetic susceptibility

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Electron Spin Resonance in Some Sandwich Type Chromaro- 20-1-32/54
matic Compounds.

of these materials corresponds to a single- non-coupled electron. The presence of a hydrogen-overrefined structure of the absorption line in solutions of the materials II and III can be explained in two ways. 1. The non-coupled electron and the positive charge of the complex are located on the chromium atom. The estimation made on the basis of this assumption shows that the density of the non-coupled 3d-electron on the positions of the hydrogen atoms of the aromatic rings is sufficient to effect an "overrefined" cleavage of the EPR spectrum. 2. The non-coupled electron and the positive charge are located on the aromatic addenda of the complex. The overrefined structure is in this case due to the interaction of the non-paired π -electron of the aromatic ring with the hydrogen atoms of this ring. The extent of cleavage, the number of components and the ratio of their intensities are in this case dependent on the distribution of electron density on the addenda molecule. The following facts speak in favor of the first assumption: a) presence of the anisotropy of the g-factor in the materials I and II, b) the value of the g-factor is less than that of a free electron. The true picture of density distribution of the non-coupled electron is probably a superposition of the two extremum cases mentioned above.
(2 illustrations, 2 Slavic references.)

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20-1-32/54

Electron Spin Resonance in Some Sandwich Type Chromaromatic
Compounds.

ASSOCIATION: Institut khimicheskoy fiziki Akademii nauk SSSR, Gor'kovskiy
gosudarstvennyy universitet

PRESENTED BY NESMEYANOV, A. N., Academician, April 19, 1957

SUBMITTED 13.4.1957

AVAILABLE Library of Congress

Card 3/3

5(1, 2)

AUTHORS:

Korshunov, I. A., Vertyulina, L. N., SOV/20-122-6-20/49
Razuvayev, G. A., Corresponding Member, AS USSR,
Sorokin, Yu. A., Domrachev, G. A.

TITLE:

Polarographic Reduction of Some Chromium Aromatic Compounds
of Sandwich Structure (Polyarograficheskoye vosstanovleniye
nekotorykh khromaromaticheskikh soyedineniy sendvichevogo
stroyeniya)

PERIODICAL:

Doklady Akademii nauk SSSR, 1958, Vol 122, Nr 6,
pp 1029-1031 (USSR)

ABSTRACT:

While the polarographic behavior of the bis-cyclopentadienyl
compounds was described sufficiently in detail (Ref 1), there
is one paper only (Ref 2) on the reduction of the cation
 $((C_6H_5)_2Cr)^+$. As in the laboratory of the authors
dibenzene-(I)-, ditoluene-(II), dimesitylene-(III)-and
bis-diphenyl chromium-(IV) iodide were prepared, furthermore
the dicumene-(V)-and di-(cyclohexyl benzene)-chromium iodides-
(VI) not described in publications, it was interesting to
study the polarographic reduction of this series of compounds.
The synthesis (according to Ref 3) of the above-mentioned

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Polarographic Reduction of Some Chromium Aromatic
Compounds of Sandwich Structure

SOV/20-122-6-20/49

derivatives ((I)-(VI)) is described together with the yields computed and ascertained. From the concentrated solution of dicumene chromium the compound (V) was precipitated as a cherry-red viscous oil by adding saturated aqueous KJ-solution. The authors did not succeed in crystallizing it. (V) is well soluble in low alcohols, acetone, methylene chloride, dichloro ethane, pyridine, dimethyl formamide, whereas it is practically insoluble in ether, CCl_4 , water and benzene.

(VI) is synthesized by a similar method. (VI) was isolated as a dark-red powder from the reaction mixture (with an addition of 50 ml purified n-nonane) by heating for 1.5 hours at 150° . Its solubility in the solvents mentioned in connection with (V) is the same as that of (V). The polarographic investigations of the iodides ((I)-(VI)) were carried out by means of the visual polarograph, which is manufactured by the institute mentioned in the Association. The reduction was carried out on the background of several 0.5 N aqueous electrolytes of lithium chloride, sodium hydroxide, potassium nitrate, sodium sulfate, hydrochloric acid and buffer

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Polarographic Reduction of Some Chromium Aromatic
Compounds of Sandwich Structure

SOV/20-122-6-20/49

solutions with pH from 2.3 to 11.75 (Fig 2). The chromium aromatic compounds produce diffusion currents in almost all above-mentioned electrolytes. An exception are hydrochloric acid and the buffer solutions with a pH-value below 2, in which they are precipitated or (e. g. (II)) do not develop any reduction waves. All iodides are reduced within one wave (Fig 1). From the study of the results obtained it can be concluded that the introduction of the alkyl-(V) or cyclohexyl-(VI) substituent into the aromatic nucleus does not exercise considerable influence upon the quantity of the semiwave-potential. In the transition from (II) to (III) the semiwave is shifted only slightly into the direction of the negative values as compared with (I). In the introduction of an aromatic substituent (IV), however, a marked shift of the potential into the range of positive values takes place. For the time being, it is still difficult to reconcile the polarographic results with the data obtained by other methods. The polarographic method, however, can play a certain role in the investigation of the nature of the class of

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Polarographic Reduction of Some Chromium Aromatic
Compounds of Sandwich Structure

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compounds in question. There are 3 figures and 4 references,
1 of which is Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut khimii Gor'kovskogo
gosudarstvennogo universiteta im. N. I. Lobachevskogo
(Scientific Research Institute of Chemistry of the Gor'kiy
State University imeni N. I. Lobachevskiy)

SUBMITTED: June 17, 1958

Card 4/4

S/081/62/000/010/043/085
B168/B180

AUTHORS: Sorokin, Yu. A., Domrachev, G. A.

TITLE: Some considerations on the comparative aromaticity of sandwich compounds of transition metals. The mechanism of electrophilic substitution

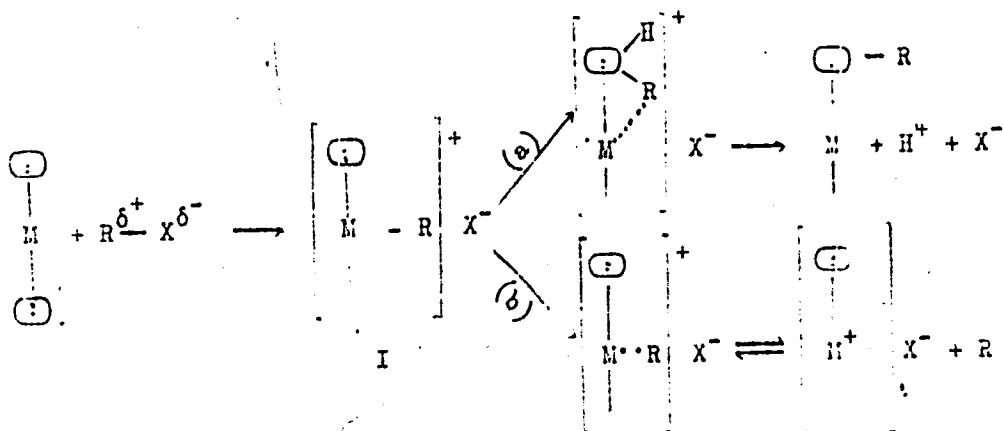
PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 167, abstract 10Zh1 (Tr. po khimii i khim. tekhnol. (Gor'kiy), no. 3, 1961, 665-669)

TEXT: A study of available experimental data on reactions of electrophilic substitution (S_E) in sandwich compounds of type (I), of the influence of the substitutes on the dipole moment of arenechrometricarbonyls (RZhKhim, no. 7, 1960, 25440), of protonization $(C_5H_5)_2M$ ($M = Fe, Ru, Os$) by strong acids (RZhKhim, 1961, 16B139) and of other facts led the authors to the conclusion that the primary attack of an electrophilic reagent is not on the ring but on the metal atom, the region of maximum electron density of the molecule

Card 1/3

S/081/62/000/010/043/085
B168/B180

Some considerations on the comparative ...



A general scheme for the reactions S_E is suggested for I and it is compared with the mechanism of electrophilic substitution in C_6H_6 .

Card 2/3

Some considerations on the comparative ...

S/081/62/000/010/043/085
B160/B180

For S_E reactions to take place I must either not be oxidized by the reagent to a stable or unstable cation (method a) or it must be oxidized reversibly (method b). The electrophilic joining of olefins to I probably takes place by a similar mechanism. In all cases the direction of the S_E reaction depends on the nature of the central atom of the metal. [Abstracter's note: Complete translation.]

Card 3/3

33925

S/079/62/032/001/001/016
D205/D302

5.1310

AUTHORS: Korshunov, I.A., Vertyulina, L.N., and Domrachev, G.A.

TITLE: Reduction of the sandwich type aromatic chromium compounds on a dropping mercury cathode

PERIODICAL: Zhurnal obshchey khimii, v. 32, no. 1, 1962, 9 - 12

TEXT: This is a continuation of a previous communication by Korshunov, et al (Ref. 1: Dokl. AN SSSR, 122, 1029, 1958). Results are given of the reduction of iodides of di(o-xylene)-chromium(I), di(m-xylene)-chromium(I), di(p-xylene)-chromium(I), benzene diphenyl chromium(I) and dihexamethylbenzene-chromium(I) hydroxide, on a dropping mercury cathode. Synthesis of the xylene derivatives were performed according to E. Fischer and W. Hafner (Ref. 2: Z. anorg. allg. ch., 286, 146, 1956) and of the hexamethylbenzene derivatives according to E. Fisher and D. Sens (Ref. 3: Ber., 89, 1809, 1956). The polarograms were recorded using a visual polarograph of all the iodides. The polarogram of the dihexamethylbenzene-chromium(I) hydroxide was recorded by an electronic integrating differentiating polarograph. Polarograms were taken in 0.5 N solutions of LiCl, KCl
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339

S/079/62/032/001/001/016
D205/D302

Reduction of the sandwich type ...

NH_4Cl , Na_2SO_4 , KNO_3 , KOH and also in buffer solutions in the pH range, 3.1 - 11.75. In the polarograms of solutions of the chromo-aromatic compounds one diffusion induced wave is observed. The diffusion current is proportional to the concentration of the chromo-aromatic compounds. The half-wave potentials are independent of the electrolyte character, the pH and the position of the methyl group in the xylene derivatives. Their value depends on the substituents in the aromatic ring as was the case in other chromoaromatic compounds of the sandwich structure. The number of electrons taking part in the electrode reaction, as determined from the Heyrovsky-Ilkovich equation equals one. The process is reversible. The authors conclude that the chromoaromatic compounds are reduced on the dropping mercury cathode in an adsorbed state, accepting one electron and passing into the neutral state. There are 3 figures, 1 table and 4 references: 1 Soviet-bloc and 3 non Soviet-bloc. The reference to the English-language publication reads as follows: W. Herwig, W. Metlesies and H. Zeiss, J. Am. Chem. Soc., 81, 6203, 1959.

Card 2/3

Reduction of the sandwich type ...

33925
S/O79/62/032/001/001/016
D205/D302

ASSOCIATION: Gor'kovskiy gosudarstvennyy universitet im. N.I. Lobachevskogo (Gor'kiy State University im. N.L. Lobachevskiy)

SUBMITTED: January 9, 1961

Card 3/3

DOMRACHEV, G.A.; RAZUVAYEV, G.A.

Interaction of dibenzenechromium (0) with acrylonitrile
and the mechanism of polymerization of the latter. Vysokom.
soed. 4 no.12:1822-1828 D '62. (MIRA 15:12)

1. Gor'kovskiy gosudarstvennyy universitet imeni
N.I. Lobachevskogo.
(Chromium compounds) (Acrylonitrile) (Polymerization)

VERTYULINA, L. N.; DOMRACHEV, G. A.; KORSHUNOV, I. A.; RAZUVAYEV, G. A.

Preparation and polarographic behavior of derivatives of
bis-ethylbenzenochromium. Zhur. ob. khim. 33 no.1:285-290
'63. (MIRA 16:1)

1. Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom
gosudarstvennom universitete imeni N. I. Lobachevskogo.

(Chromium compounds) (Polarography)

ROZENBERG, Ye.L.; DOMRACHEV, G.A.

Particular features of light absorption by rare-earth β -diketonates
in the excited state. Teoret. i eksper. khim. 1 no. 5:655-662
S-O '65 (MIRA 19:1)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut, Gor'kiy.
Submitted July 2, 1965.

DOMRACHEV, I.V.

DECEASED

1961/3

c 1961

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MEDICINE

DOMRACHEV, N., otv. red.; PITIRIMOV, V., red.; BELYAYEV, O.,
red.; BIRYUKOV, G., red.; RUMYANTSEVA, V., red.;
SOLODYANNIKOV, A., red.; TRAKHTENBERG, G., red.

[Give way to the new and the advanced] Dorogu novomu,
peredovomu. Kirov, Izd-vo "Kirovskaya Pravda, 1961. 58 p.
(MIRA 18:3)

1. Obshchestvo po rasprostraneniyu politicheskikh i nauch-
nykh znaniy RSFSR. Kirovskoye oblastnoye otdeleniye.

3
1
18 18
Distr: 4E2c

Use of Steel Shavings in Electric Steel Melting. N. I.
Donskoy. (Leningradskoe, 1930, (3), 22-23). (In
Russian). A brief account is given of acid electric-furnace
practice with increased (up to 1150 kg. of a total charge of
3417 kg) utilization of steel shavings. Data on steel com-
positions and properties corresponding to various properties
of shavings are shown. - S. S.

Rt

18(5)

S07/128-59-5-25/35

AUTHOR: Domrachev, N.I., Engineer

TITLE: Pressure Die Casting of Water Steam Fittings Made of -Brass

PERIODICAL: Liteynoye Proizvodstvo, 1959, Nr 3, pp 41.42 (USSR)

ABSTRACT: In the Kirov machine factory imeni 1 Maya , instead of bronze OZS 3-12-5 and the mould casting, pressure die casting with light metal is used. This requires a press mould made of special steel 3X2V8. Operation of the press mould is described. The max. temperature in the press mould during the pressure die casting is 450 - 500 °centigrade. The lubricant consists of 80% machine grease and 20%graphite. The alloy used consisted of 57 - 62% Cu., 0.8 - 1.5% Pb., 36 -40% Zn., and max. 2% miscellaneous. The photograph shows the microstructure of the alloy used. There is one 1 photograph and 1 table-

Card 1/1

NAIIVKIN, V.D.; RONOY, A.B.; KHAIN, V.Ye.; OKOLOV, B.S.; DOMRACHEV,
S.M.; TIKHIY, V.N.; POZNER, V.M.; FORSH, N.N.; LYUTKEVICH,
Ye.M.; SLAVIN, V.I.; SAZONOV, N.T.; SAZONOVA, I.G.;
SHUTSKAYA, Ye.K.; KRASNOV, I.I.; KALENOVA, G.N.; VINOGRADOV,
A.P., glav. red.;

[History of the geological development of the Russian Plat-
form and its margins] Istoriiia geologicheskogo razvitiia
Russkoi platformy i ee obramleniia. Moskva, Nedra, 1964.
251 p. ____ [Maps] Karty. 98l. (MIRA 18:4)

DOMRACHEV, S. M.

41734

USSR/Geology
Stratification

Jan/Feb 1948

"Stratigraphy of the Devonian Deposits of the Western Slopes of the Urals Within the Limits of the Ufimsk Amphitheater and Kara-Tau," S. M. Domrachev, V. S. Meloshchenko, N. G. Chochla, 314 pp

"Izv Akad Nauk SSSR, Ser Geol" No 1

Discusses basins of the Ufa, Aa, Yurezan, and Sim Rivers. Author presents some new data obtained during his studies on the Devonian deposits of the Ufimsk amphitheater and Kara-Tau, and attempts to set up a single standard on which the stratigraphy of this region can be based. His data referring to

41734

USSR/Geology (Contd)

Jan/Feb 1948

determination of growth has a great significance in deep drilled bores.

41734